



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MASSACHUSETTS 02109-3912

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

**JUN 29 2012**

Mr. Robert Cox  
Director of Public Facilities  
Town of Shrewsbury  
100 Maple Avenue  
Shrewsbury, Massachusetts 01545

Re: PCB Risk-Based Disposal Approval under 40 CFR § 761.61(c) and § 761.79(h)  
Spring Street School  
Shrewsbury, Massachusetts

Dear Mr. Cox:

This is in response to the Town of Shrewsbury (the Town) Notification<sup>1</sup> for approval to clean up and dispose of PCB-contaminated building materials in the Spring Street School located at 123 Spring Street in Shrewsbury, Massachusetts (the Site). The Site contains caulk and other building materials that exceeds the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20(a), § 761.61, and § 761.62.

In its Notification the Town has proposed the following PCB cleanup and disposal plan:

- Remove PCB caulk and glazing with greater than or equal to ( $\geq$ ) 50 ppm and associated window/door frames and dispose of in a TSCA approved disposal facility or RCRA hazardous waste landfill in accordance with §761.61(a)(5)(i)(B)(2)(iii):
- Encapsulate exterior PCB-contaminated *porous surfaces* (i.e., entire stucco panel) with two coats of an epoxy coating;
- Encapsulate exterior PCB-contaminated *porous surfaces* (i.e., brick and mortar) with a new window unit to a minimum of 2 inches from the caulk joint; and,

---

<sup>1</sup> The notification was submitted by Lord Associates, Inc. on behalf of the Town to satisfy the notification requirements under 40 CFR § 761.61(c) and § 761.79(h). Information was submitted dated January 4, 2012 (PCB Risk-Based Cleanup and Disposal Plan (RBDP)); February 8, 2012 (e-mail window and membrane flashing specs and door abatement); February 15, 2012 (Revised RBDP); March 15, 2012 (Revised RBDP); May 16, 2012 (Supplemental data to support encapsulation request); and June 28, 2012 (email clarification –stucco encapsulation). These submittals shall be referred to as the "Notification".

- Remove soils with greater than (>) 1 ppm but less than (<) 50 ppm PCBs and dispose of as a *PCB remediation waste* in a state permitted landfill in accordance with § 761.61(a)(5)(i)(B)(2)(ii).

Based on the EPA's review, the information provided in the Notification meets the requirements under § 761.62(a) and § 761.79(h) for abatement of PCB caulk and § 761.61(c) for encapsulation of the *porous surfaces*. EPA finds that the proposed encapsulation of PCB-contaminated *porous surfaces* should effectively prevent direct exposure of these PCB-contaminated *porous surfaces* to building users provided the encapsulated surfaces are maintained. As such, EPA may approve the encapsulation under § 761.61(c).

The Town may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62(a); § 761.79(h); its Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the long-term monitoring sampling indicate an unreasonable risk to the building users.

Please be aware that this Approval requires the Town to conduct outreach activities for the school community concerning the PCB remediation work. Documentation of the outreach effort shall be submitted to EPA (Attachment 1, Approval Condition 11).

Please note that the Town will be required to record a notation on the deed as required under § 761.61(a)(8) since PCBs at > 1 ppm will remain on the Site.

This Approval does not release the Town from any applicable requirements of federal, state or local law, including the Massachusetts Department of Environmental Protection (MassDEP) requirements under the Massachusetts Contingency Plan (MCP).

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)  
United States Environmental Protection Agency  
5 Post Office Square, Suite 100  
Boston, Massachusetts 02109-3912  
Telephone: (617) 918-1527  
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in blue ink, appearing to read "James T. Owens III", with a stylized flourish at the end.

James T. Owens III, Director  
Office of Site Remediation & Restoration

cc R. Tella, Lord Associates  
MassDEP, Central Region  
Shrewsbury Board of Health  
File

Attachment 1: PCB Approval Conditions



**ATTACHMENT 1:**

**PCB RISK-BASED DISPOSAL APPROVAL CONDITIONS  
SPRING STREET ELEMENTARY SCHOOL (the Site)  
123 SPRING STREET  
SHREWSBURY, MASSACHUSETTS**

**GENERAL CONDITIONS**

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site and identified in the Notification.
2. The Town of Shrewsbury (the Town) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. The Town must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, the Town shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. The Town is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time the Town has or receives information indicating that the Town or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by the Town are authorized to conduct the activities set forth in the Notification. The Town is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release the Town from compliance with any applicable requirements of federal, state or local law; or 3) release the Town from liability for, or otherwise resolve any violations of federal, state or local law.

#### **NOTIFICATION AND CERTIFICATION CONDITIONS**

9. This Approval may be revoked if the EPA does not receive written notification from the Town of its acceptance of the conditions of this Approval within 10 business days of receipt.
10. The Town shall submit the following information for EPA review and/or approval:
  - a. a certification signed by its selected abatement/demolition contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
  - b. a contractor work plan, prepared and submitted by the selected demolition or abatement contractor(s) describing the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
  - c. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

#### **DECONTAMINATION AND DISPOSAL CONDITIONS**

11. The Town shall conduct outreach activities for the Spring Street Elementary School community on the PCB remediation work. The Town shall submit information on its outreach activities within 30 days of receipt of this Approval.
12. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.



13. All visible residues of PCB-contaminated caulk and glazing (i.e. *PCB bulk product waste*) shall be removed as described in the Notification.
14. The cleanup standard of bulk *PCB remediation waste* (i.e. soil) shall be less than or equal to ( $\leq$ ) 1 part per million.
  - a. Verification samples shall be collected on a bulk basis (e.g. mg/kg) and reported on a dry-weight basis. Verification sampling shall comply with Subpart O; samples shall be collected from both excavation bottoms and sidewalls, as applicable.
  - b. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
15. Initial post-abatement indoor air sampling and indoor surface wipe sampling for PCBs shall be conducted to determine the impact of the abatement activities.
  - a. Initial post-abatement sampling
    - i) Indoor air sampling shall be conducted in accordance with EPA Method TO-4A or TO-10A. Sufficient sample volumes shall be collected to provide a minimum laboratory reporting limit of less than ( $<$ )  $0.05 \mu\text{g}/\text{m}^3$ . At a minimum, PCB analysis shall include PCB homologues and/or PCB congeners.
    - ii) Wipe sampling of indoor surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e.  $\mu\text{g}/100 \text{ cm}^2$ ). Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.
  - b. In the event that PCB concentrations in the wipe samples are greater than or equal to ( $\geq$ )  $1 \mu\text{g}/100 \text{ cm}^2$  or indoor air samples results are greater than ( $>$ )  $0.300 \mu\text{g}/\text{m}^3$ , the Town shall contact EPA for further discussion and direction on alternatives, which may include development of a site-specific risk exposure assessment.
  - c. Within 7 days of receipt of this Approval, the Town shall submit a plan identifying the number and locations of the post-abatement air and surface wipe samples. A figure identifying sampling locations should be included with the plan.

- d. The Town shall submit a monitoring and maintenance implementation plan (MMIP) to monitor the long-term effectiveness of the encapsulants. (See Condition 18).
16. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
- a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
  - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
  - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

#### **DEED RESTRICTION AND USE CONDITIONS**

17. Within thirty (45) days of completing the activities described in the Notification and in the Approval, the Town shall submit for EPA review and approval, a draft deed restriction for the Site. The deed restriction shall include: a description of the extent and levels of contamination at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site; and the long-term monitoring and maintenance requirements on the Site. Within seven (7) days of receipt of EPA's approval of the draft deed restriction, the Town shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.

#### **INSPECTION, MODIFICATION AND REVOCATION CONDITIONS**

18. Within 60 days of completion of the work authorized under this Approval, the Town shall submit for EPA's review and approval, a detailed monitoring and maintenance implementation plan (MMIP) for the surface barriers and for indoor air. The Town shall incorporate any changes to the MMIP required by EPA.
- a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and, reporting requirements, as applicable.



- b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, including teachers, parents, student, other on-site workers, and interested stakeholders.
  - c. The MMIP also shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the barriers encapsulating the PCB-contaminated surfaces.
  - d. The Town shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the barriers.
  - e. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.
19. The Town shall allow any authorized representative of the Administrator of the EPA to inspect the Sites and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by the Town to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
20. Any modification(s) in the plan, specifications, or information submitted by the Town, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. The Town shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification.
21. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from the Town to make a determination regarding potential risk.
22. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.



**RECORDKEEPING AND REPORTING CONDITIONS**

23. The Town shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal and the analytical sampling shall be established and maintained by the Town in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
24. As required under Condition 18 of this Approval, the Town shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.
25. The Town shall submit a final report, in both hard copy and electronic version, to the EPA within 90 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities including photo documentation; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of and the size of the PCB cleanup area(s); copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The Report shall also include a copy of the recorded deed restriction and a certification signed by a the Town official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.
26. Required submittals shall be mailed to:  
  
Kimberly N. Tisa, PCB Coordinator  
United States Environmental Protection Agency  
5 Post Office Square, Suite 100 – (OSRR07-2)  
Boston, Massachusetts 02109-3912  
Telephone: (617) 918-1527  
Facsimile: (617) 918-0527
27. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

\*\*\*\*\*

**END OF ATTACHMENT 1**